UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,597	02/12/2001	Nathaniel M. McCully	07844-412001 / P376	9486

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EXAMINER
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ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 July 2004</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-6,8-19 and 21-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6,8-19 and 21-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 February 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>01/28/05; 06/21/04</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: application, filed on 02/12/01 and

   IDS filed on 01/09/04; IDS filed on 06/17/04; Amendment filed 07/26/04; and IDS

   filed on 01/28/05.

2. Claims 1-6, 8-19, 21-27 are pending in the case, with claims 1, 14 and 27 being

   independent.

3. Claims 7 and 20 have been cancelled.

4. The present title of the application is "**METHOD FOR CALCULATING CJK**

   EMBOXES IN FONTS" (as originally filed).

5. **THIS ACTION IS MADE FINAL.**

Claim Rejections - 35 USC § 112

◆ **The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-6, 8-19, 21-27 are rejected under 35 U.S.C. 112, first paragraph, as

   failing to comply with the written description requirement. The claim(s) contains

   subject matter which was not described in the specification in such a way as to

   reasonably convey to one skilled in the relevant art that the inventor(s), at the

   time the application was filed, had possession of the claimed invention.

   - The subject matters "associating a reference character with each of

     the plurality of characters" and "using the associated reference

     character to determine a coordination point for each distinct embox"

are not properly described in the specification. None of the figures

illustrate this subject matter. Page 2 line 25-26 and page 4 line 9-12

of the specification describe comparison and not associating a

reference character with each character, but even the

aforementioned comparison is not described in the detailed

description (page 8 line 14-page 9 line 20).

- The subject matter "aligning each distinct embox with a

  coordination line using the determined coordination point for each

  of the plurality of characters to typeset the plurality of characters on

  the text line" not properly described in the specification. None of the

  figures illustrate this subject matter. Page 2 line 28-29, page 4 line

  11-12 and page 9 line 13-15 of the specification describe

  coordinating each character's coordination point with a coordination

  line.

  Also, why coordination point for each of the plurality of characters is

  used to align each distinct embox with the coordination line? Why

  the determined coordination point for each distinct embox is not

  used to align each distinct embox with the coordination line?

♦ **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

7. Claims 1-6, 8-19, 21-27 are rejected under 35 U.S.C. 112, second paragraph, as

being incomplete for omitting essential elements, such omission amounting to a

gap between the elements. See MPEP § 2172.01. The omitted elements are:

    a. Regarding claims 1, 14 and 27:

- "the vertical and horizontal size of each embox being said

  determined character dimensions" is an essential element for

  connecting the step of "<u>determining dimensions</u> of each of a

  plurality of characters to be typeset on a text line " and "associating

  a distinct embox with each of the plurality of characters".

- "same dimensions" is an essential element omitted from

  "preselected reference characters all being characters from one

  font".

    b. Regarding claims 8 and 21:

- "setting a line height <u>for the text line</u> to be the height of said largest

  character" and "coordinating the plurality of characters' <u>individually</u>

  <u>determined reference points (coordination points) with the</u>

  <u>reference line (coordination line) for the text line, after which the</u>

  <u>characters are centrally positioned with regard to line height</u>" is

  omitted.

8. Amended claim 9 recites the limitation "the glyph bounding box" in line 3. There

is insufficient antecedent basis for this limitation in the claim.

9. Amended claim 22 recites the limitation "the glyph bounding box" in line 3. There

is insufficient antecedent basis for this limitation in the claim.

Claim Objections

10. Claim 1, 2 and 15 are objected to because of the following informalities:

   a. In line 9 of claim 1 change "all being characters from one font" to "all being

   characters from same font".

   b. In line 4-5 of claim 2 and 15 "include a reference character at each

   distinct point dimension" is not correct. Please consider revising it.

   Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

•

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

12. Claims 1-6,8-19 and 21-27 are rejected under 35 U.S.C. 102(b) as being

anticipated by Masahiko Muramatsu Japanese publication 06-020026

(Muramatsu).

13. Regarding independent claim 1, "A method for typesetting a text line, comprising:

determining dimensions of each of a plurality of characters to be typeset

on a text line (Muramatsu discloses in paragraph 0017 and in Fig. 2 metrics

information corresponding to a character code which the examiner interpret as

dimensions of that characters);

associating a distinct embox with each of the plurality of characters

(Muramatsu discloses in Figs. 5a and 5b and in paragraph 0032 an embox

(Escapement W) with each characters),

associating a reference character with each of the plurality of characters,

each associated reference character being one of one or more preselected

reference characters, the one or more preselected reference characters all being

characters from one font (Muramatsu discloses in paragraphs 0012 and 0049

and also in claim 2)

using the associated reference character to determine a coordination point

for each distinct embox and thereby determine a coordination point for each of

the plurality of characters (Muramatsu discloses in paragraph 0033-0038 and in

paragraphs 0089-0138 and Figs. 10-17 determining (X0, Y0) as coordination

point for Escapement W (embox)); and

aligning each distinct embox with a coordination line using the determined

coordination point for each of the plurality of characters to typeset the plurality of

characters on the text line (Muramatsu discloses in paragraphs 0036 and 0037).

14. Regarding dependent claim 2, "the method of claim 1, wherein each of the

plurality of characters has a point dimension and the one or more preselected

reference characters include a reference character at each distinct point

dimension found among the plurality of characters." Muramatsu discloses in

paragraphs 0017, 0102 and 0104.

15. Regarding dependent claim 3, "the method of claim 2, wherein the one or more

preselected reference characters are each a CJK font character." Muramatsu

discloses in paragraph 0102.

Muramatsu discloses reading a character pattern from a font file by a JIS code,

and, thus, a font to be treated is a Japanese font, which is one of the CJK font.

16. Regarding dependent claim 4, "the method of claim 1, wherein the one or more

preselected reference characters are each a European-language en uppercase

letter having a cap height." Muramatsu discloses in paragraphs 0031 and 0040

and in Fig. 3, for example, "H" en uppercase having a cap height "LN2".

17. Regarding dependent claim 5, "the method of claim 4, wherein the one or more

preselected reference characters are each an en H or an en X." Muramatsu

discloses in paragraph 0040.

18. Regarding dependent claim 6, "the method of claim 1, wherein determining the

coordination point for each of the plurality of characters comprises:

determining a glyph bounding box for the one or more preselected

reference characters;

centrally positioning the glyph bounding box in each distinct embox; and

determining a point on the glyph bounding box as the coordination point of each

distinct embox." Muramatsu disclose in paragraph 0033.

19. Regarding dependent claim 8, "the method of claim 1, further comprising:

finding a largest character having a largest point dimension among said

plurality of characters;

setting a line height to be a height of said largest character; and

aligning the plurality of characters with a coordination line for the largest

character." Muramatsu disclose in paragraphs 0038-0053.

20. Regarding dependent claim 9, "the method of claim 1, wherein determining the.

coordination point for each of the plurality of characters comprises:

determining the glyph bounding box for the one or more preselected

reference characters;

determining an average value for top, bottom, left, and right differences between said embox and said bounding box;

determining an ideographic character face box located inside and separated from said embox edges by the average value; and

determining a point on the ideographic character face box as the coordination point." Muramatsu discloses in paragraphs 33-37 determining the center of gravity from the bounding box and coordinating it with the center of the embox and by doing this the ideographic character face box that is located inside and separated from the embox edges by the average value is determined.

21. Regarding dependent claim 10, "the method of claim 9, wherein N (N≥2) reference characters are present, and determining the average value comprises dividing the sum of the top, bottom, left, and right differences obtained for the N reference characters by 4N to determine said average value." Muramatsu disclose in paragraphs 33-37.

22. Regarding dependent claim 11, "the method of claim 1, wherein determining the coordination point for each of the plurality of characters comprises:

determining a glyph bounding box for the one or more preselected reference characters;

determining a first average value for the top and bottom difference between the embox and the bounding box;

determining a second average value for a left and right difference;

determining an ideographic character face box located inside and

separated from said embox top and bottom edges by the first average value and

the embox left and right edges by the second average value; and

determining a point on the ideographic character face box as the

coordination point." Muramatsu discloses in paragraphs 33-37 determining the

center of gravity from the bounding box and coordinating it with the center of the

embox and by doing this the ideographic character face box that is located inside

and separated from the embox edges by the average value is determined. The

first average value and the second average value disclosed by Muramatsu's

reference are equal.

23. Regarding dependent claim 12, "the method of claim 9, wherein the one or more

preselected reference characters include a glyph whose shape is substantially a

square." Muramatsu disclose in Figs. 15 and 16.

24. Regarding dependent 13, "the method of claim 12, wherein the one or more

preselected reference characters include the Japanese ideographs "utsu" and

"naga."" Although Muramatsu does not explicitly disclose having at least one

reference character as the Japanese ideographs "utsu" and "naga." but it

discloses that the JIS coded characters are used. JIS coded characters include

both "utsu" and "naga".

25. Claims 14-19 and 21-26 recite a computer program product, stored on a machine-readable medium storing instructions operable to cause a programmable processor for executing the method of claims 1-6 and 8-13. Having a medium configured to store or transport computer readable code in a computer system is inherent. For example compact disc has been included and used in the computer systems since 1990s or magnetic data storage devices have been used since 1980s.

26. Claim 27 recites the system for performing the method of claims 1-6; therefore it is similar in scope to claim 1 and therefore is rejected under the same rationale.

Response to Arguments

27. Applicant's arguments, see page 13 "Section 112, First Paragraph Rejections", filed 07/26/04, with respect to claims 1-6, 8-19, 21-27 have been fully considered and are persuasive. The 35 U.S.C §112, first paragraph rejection of claims 1-6, 8-19, 21-27 has been withdrawn.

28. Applicant's arguments see page 14 lines 6- page 15 line 17, filed 07/26/04, with respect to claim 1 have been fully considered but they are not persuasive.

Applicant states that paragraphs 89 and 138 as well as Figures 10-17 of Muramatsu do not disclose applicant's aligning step. Examiner disagrees.

Muramatsu discloses in paragraph 89 position a character at a specified position in the text line by coordinating the character's coordination point with the coordination line in the text line by calculating the movement magnitude of the character's coordination point in the direction of X and Y and moving it. Applicant discloses the same in page 9 line 6-20.

29. Applicant's arguments see page 16 paragraphs 1-3, with respect to claim 6 have been fully considered but they are not persuasive.

Applicant's argument in the last 3 lines of the second paragraph reads as follows:

"Thus *the center-of-gravity point is a coordination point for a character to be aligned* inside Escapement W. However Muramatsu does not use the coordination pint to align a plurality of distinct emboxes along a coordination line as required by claim 6."

Examiner disagrees. Muramatsu discloses in paragraphs 35-37 determining the coordination point for a character to be aligned with the coordination line. Muramatsu discloses positioning the reference character's bounding box centrally inside the embox (escapement box) by determining and using the center of gravity of the bounding box, it discloses that the base of the bounding box (lower edge) is the zero point (coordination point) and therefore the character can be positioned in the text line by coordinating the coordination point with the coordination line. The coordination point of the character is the same as the coordination point of the character's embox.

30. Applicant's arguments see page 17 the first two paragraphs, with respect to claims 9-11 and 22-24 have been fully considered but they are not persuasive.

Muramatsu discloses in paragraphs 33-37 determining the center of

gravity from the bounding box and coordinating it with the center of the embox

and by doing this the ideographic character face box that is located inside and

separated from the embox edges by the average value is determined. The first

average value and the second average value disclosed by Muramatsu's

reference are equal.

Conclusion

31. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed

within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

32. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Faranak Fouladi** whose telephone number is

703-305-3223. The examiner can normally be reached on Mon-Fri from 8:00-

4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Patrick Edouard** can be reach at **(703) 308-6725.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to: 703-872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service

Office whose telephone number is 703-306-0377.

PATRICK N. EDOUARD
PRIMARY EXAMINER

Faranak Fouladi
Patent Examiner
Art Unit 2674

February 24, 2005